



REGISTER OF HERITAGE PLACES - ASSESSMENT DOCUMENTATION

11. ASSESSMENT OF CULTURAL HERITAGE SIGNIFICANCE

The criteria adopted by the Heritage Council in November, 1996 have been used to determine the cultural heritage significance of the place.

PRINCIPAL AUSTRALIAN HISTORIC THEME(S)

- 3.5 Developing primary production
- 8.10.5 Advancing knowledge in science and technology

HERITAGE COUNCIL OF WESTERN AUSTRALIA THEME(S)

- 301 Grazing & pastoralism & dairying
- 402 Education & science

11.1 AESTHETIC VALUE*

Avondale Research Station has aesthetic significance as an interpretive example of a rural farming property that has evolved over time, and that provides a visual experience of the rural working lifestyle. (Criterion 1.1)

The 1880s Homestead is a good example of a Victorian Georgian style rural dwelling that evolved over time and has retained its rural context in a picturesque setting. (Criterion 1.1)

The Stables dating from the 1890s feature very well-detailed timber horse stalls and roof structure, and are a rare example of innovative design. (Criterion 1.2)

Avondale Research Station has a landmark quality within the picturesque rural landscape. (Criterion 1.3)

Avondale Research Station makes an important contribution to the historic landscape of the Avon valley in complementing and enhancing the historic fabric of the region. (Criterion 1.4)

11.2 HISTORIC VALUE

The *Avondale* property was one of the earliest pastoral properties established in the Beverley district and was developed by Nicholas Carey and his grandnephew William Herbert deLisle from 1838 to 1904, before

* For consistency, all references to architectural style are taken from Apperly, R., Irving, R. and Reynolds, P. *A Pictorial Guide to Identifying Australian Architecture: Styles and terms from 1788 to the present*, Angus & Robertson, North Ryde, 1989.

being acquired by the government for agricultural subdivision in 1910. It was subsequently developed as State Farm from 1919. (Criteria 2.1 & 2.3)

The early history of *Avondale Research Station* illustrates the development of pastoral and agricultural pursuits in the Avon Valley in the nineteenth and early twentieth centuries and the initiative of the Mitchell government in promoting agriculture and closer land settlement, including World War One soldier settlement. (Criterion 2.1)

The various components that comprise *Avondale Research Station* form a rural cultural environment that demonstrates historic associations with the early European settlement of the Avon Valley. It demonstrates specific government initiatives in the establishment and the subsequent development of the place as a site of agricultural research and a showcase of rural work and life. (Criterion 2.1)

Avondale Research Station was the venue of an important research project into braxy-like disease in sheep in the early 1930s, and the research Laboratory was constructed specifically for the project. (Criterion 2.1)

The significant buildings of *Avondale Research Station*, namely the Homestead (1840s, 1880s), Stables (1890s), Silo (1927) and former Laboratory (1930), together with less significant post-World War Two buildings, are indicative of the various stages of development and use of the property over the years. (Criterion 2.2)

Avondale Research Station is associated with Dr Eric John Underwood, first chair of the School of Agriculture at the University of Western Australia, who worked on various projects at Avondale. (Criterion 2.3)

Constructed in the 1890s, the Stables are a very fine example of innovation in the design of the feeding chutes to the horse stalls and of architectural detail in the timber roof structure. (Criterion 2.4)

The Silo, built in 1927 to a non standard Public Works Department plan, demonstrates the important scientific research into wheat production carried out at that time at the *Avondale Research Station*, known then as Avondale Seed Farm. (Criterion 2.4)

Avondale Research Station has been a research station since 1926, and is the site of the only known research laboratory purpose built at an agricultural research station during the Inter-War period. (Criterion 2.4)

11.3 SCIENTIFIC VALUE

The interpretation of *Avondale Research Station* contributes to the understanding of agricultural research, as reflected through the buildings and the landscape and plantings. (Criterion 3.1)

11.4 SOCIAL VALUE

Avondale Research Station is valued for its role in agricultural research and education, born out by the local community's financial contribution to the establishment of the Laboratory in 1930 and the contribution of farm machinery for the Discovery Farm museum in the late 1970s. (Criterion 4.1)

Avondale Research Station provides an interpretive experience for visitors, demonstrating a rural way of life underpinned by the Avon Ascent Landcare Drive tours and the operation of the Discovery Farm education facility. (Criterion 4.1)

Avondale Research Station contributes to the local and wider community's sense of place for its links to the early European settlement of the Avon Valley and for its ongoing contribution to agricultural research and education in the State. (Criterion 4.2)

12. DEGREE OF SIGNIFICANCE

12.1 RARITY

Constructed in the 1890s, the Stables are believed to be a rare example of their type in the State with horse stalls containing self-filling fodder bins. (Criterion 5.1)

12.2 REPRESENTATIVENESS

Avondale Research Station is representative of government initiative in the early twentieth century in establishing state farms and agricultural research stations as places of scientific study and education. (Criterion 6.1)

12.3 CONDITION

Avondale Research Station is generally in good condition. The corrugated iron roofs mostly appear to be in good condition, although there is some evidence of rust on the Stable roof. The brick walls of the Homestead are in fair to good condition with minimal evidence of fretting except for the stone buildup walls on the front of the east wing, which require some attention where the mortar has fretted in places. The Homestead has been restored and the interior is in good condition. The Stables are in good condition on the interior and exterior. The Silo appears to be structurally stable and in good condition. The former Laboratory is in well-maintained condition.

12.4 INTEGRITY

Avondale Research Station has a moderate to high degree of integrity. The place has continued to be used and developed as an agricultural research and training facility since its establishment as a State Farm in 1919.

12.5 AUTHENTICITY

The original structure, form and fabric of the buildings that comprise *Avondale Research Station* are mostly intact, however the restoration of the Homestead resulted in the loss of some original fabric including original timber verandah floors, and some floors in the west wing, and the installation of fitouts in the bathrooms and kitchen. No structural alterations are evident to any of the buildings, except the removal of a wall in the west wing (kitchen) of the Homestead and, although small changes have taken place, there is more than sufficient evidence to determine authentic detail and fabric of the buildings at all stages of their development. *Avondale Research Station* demonstrates a moderate to high degree of authenticity.

13. SUPPORTING EVIDENCE

The documentary evidence has been compiled by Irene Sauman, Historian. The physical evidence has been compiled by Laura Gray, Conservation Consultant.

13.1 DOCUMENTARY EVIDENCE

Avondale Research Station comprises a single storey brick and corrugated iron Homestead (1880s) constructed in the Victorian Georgian style, a vernacular single and double storey corrugated iron Stables (1890s), a concrete grain Silo (1927), and a single storey brick and iron field Laboratory (fmr) (1930). There are a number of other buildings on the site including: workshop (possibly the former barn), dwelling associated with the Laboratory (1931), weighbridge, three worker's dwellings (1928, 1938 & 1957), other various worker's dwellings dating from the 1960s, various steel framed and clad farm sheds, entrance structure and museum (1979) and toilet buildings. Originally developed as a pastoral property from the 1840s, Avondale was purchased by the Government in 1910 for subdivision into farms. The Homestead block became a State Farm in 1919. All State Farms were renamed Research Stations in 1936. The Homestead and Stables were restored and a machinery museum established as part of a bicentennial project, completed in 1979. The restored buildings and the museum are currently leased by the Shire of Beverley and Alcoa Australia Limited as Avondale Discovery Farm education facility, while *Avondale Research Station* continues to operate as an agricultural research facility.

The Avon Valley district was settled early following the discovery of good pastoral lands in 1830, by a party led by Ensign Robert Dale of the 63rd Regiment. Dale made three expeditions to the region between 1830 and 1831. On his third journey, he was instructed by Governor Stirling to examine the country within fifty miles north and south of Mount Bakewell. During this expedition, the party discovered a tributary of the Avon River, which was later named the Dale River.¹ In 1836, Stirling took up a 4,000-acre (1,620 ha) grant, Avon Location 14, in the vee of the river junction. The adjoining Avon Location K, of 3,000 acres (1,215 ha), was granted to Captain Mark John Currie, the first Harbour Master of the colony.²

In September 1838, Nicholas Carey purchased Location K for £330, raising a mortgage for the full amount with Mark Currie. The mortgage was registered as paid on 19 October 1842.³ In December 1838, Carey leased Location 14 from Governor Stirling, subsequently purchasing the land for £750 in January 1846, at the end of the lease period.⁴ In June 1839, he purchased the 3,000-acre (1,215 ha) Avon Location m from George Leake, and later added Locations 52 and 53 to the landholding. These locations were adjoining and formed a property of some 13,330 acres (5,400 ha),

¹ Jones, Henry & Johnston, David, *The Story of Avondale*, WA Department of Agriculture, Perth, 1994, pp. 8-11; Statham, Pamela, *Swan River Colony 1829-1850*, In Stannage, C. T. (ed) *A New History of Western Australia*, UWA Press, Perth, 1981, pp. 181-210

² Land Grant No. 121, Avon Location K; Land Grant No. 396, Avon Location 14.

³ Deeds of Memorial, Book 1 no. 634, 13 September 1838 & no.635, 14 September 1838; Book 2 no. 395, 19 October 1842.

⁴ Deeds of Memorial, Book 1 no. 682, 11 December 1838 & Book 4 no. 143, 10 December 1847.

which Carey named Avondale, for its position in the V of the junction of the Avon and Dale rivers.⁵

Nicholas Carey was from Frogmore, on the island of Guernsey. He had arrived in the Swan River Colony in 1830-1831 and was living at York by 1835. He was appointed a Justice of the Peace in 1837.⁶ Carey visited Britain between 1841 and 1843 and, in 1844, he leased Avondale to James Bartram and George Kersley for four years, for an annual rental of £35 and improvements. The improvements included a 'good and substantial dwelling house with a stone foundation and rammed earth walls' to the value of £100 sterling, a barn worth £50 and 50 acres (20 ha) of land cleared.⁷ The southwest portion of Location 14 was the site of soldiers barracks, a mud brick structure built in the 1830s and most likely used by the lessees of Avondale. In 1849, Carey returned to Britain after appointing Charles Wittenoom as his agent in the Colony. A letter written in December 1849, just before he left, mentions stables, as well as the barn, both of which were still under construction. In 1852, Bartram and Kersley renewed their lease of Avondale for another five years.⁸ The buildings they constructed were most likely those marked on a 1910 survey map of the property and situated some distance northwest of the current Homestead.⁹

Other pastoral lands were taken up in the Beverley district in the 1840s and 1850s, and the town of Beverley was surveyed in 1868, on the Perth-Albany Road on land adjoining Avondale.¹⁰ In 1871, Nicholas Carey appointed James William Broun as his attorney and agent, and Broun arranged a ten-year lease of Avondale to William Smith, at a yearly rental of £100.¹¹ The following year, Nicholas Carey surrendered a half-acre (2,023 sqm) site on Avondale for a school. The site was designated Reserve 8017 and was adjacent to the house and farm buildings believed to have been constructed by Bartram and Kersley.¹² Smith was also required to make improvements on Avondale, including the construction of a new house. In March 1884, Nicholas Carey wrote to James Broun, commenting that:

It is very satisfactory to know that Mr Smith has nearly finished the house and that you considered he had done as much as could be expected of him under the disadvantages of dear labour and material.¹³

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- ⁵ Deeds of Memorial, Book 1 no. 779 & no. 780, 26 June 1839; Deed of Memorial, Book 11 no.1038, 17 February 1894, a memorial of Nicholas Carey's will and the land which comprised Avondale.
- ⁶ Jones, Henry & Johnston, David, op cit, p. 12; Erickson, Rica, *Bicentennial Dictionary of Western Australians*, Perth, UWA Press, 1988, p. 469.
- ⁷ Broun family papers, 1844-1884, MN 1572, ACC 4957A, Battye Private archives, Item 8, Indenture of lease, 15 August 1844.
- ⁸ Broun family papers, op cit, letter of instructions to Charles Wittenoom, 6 January 1849; Item 2, copy of rent accounts for 1847 & 1848; Item 9, Lease of Avondale, 18 August 1852; Thomas, Alf T., *The History of Beverley 1946*, A. T. Thomas, Perth, [1946], pp. 36 & 74.
- ⁹ DOLA correspondence file, Avondale Estate, survey map of estate by surveyor John Hall, 1910, SROWA AN 3/24. CONS 1778, 4915/1910, Vol. 2.
- ¹⁰ Thomas, Alf T. *The History of Beverley 1946*, Perth, [1946], pp. 3-11; Dennis, Barry J. *A History of the Economic Development of Beverley and the Upper Avon Valley*, typescript, 1968, p. 17; Certificate of Title, Vol. 477 Fol. 53, sketch of land shows the position of the town on the boundary of Avon Location K.
- ¹¹ Broun family papers, op cit, Items 11 & 12, Lease and power of attorney, 24 March 1871.
- ¹² Deed of Memorial Book 7 no. 751, 9 April 1872; DOLA Reserves Index Enquiry, Reserve 8017; survey map of estate by surveyor John Hall, 1910, op cit. The school reserve was cancelled in 1910 when the Government purchased the property.
- ¹³ Broun family papers, op cit, Item 7, letter from Nicholas Carey to James Broun, 4 March 1884.

This would be the house currently standing and referred to as the Homestead.

In the 1880s, Western Australia was not producing enough wheat for local consumption and had to import flour from the eastern states. To encourage agriculture and closer land settlement, the Government arranged the construction of the Great Southern railway line linking Perth with Albany. The line, which was opened to Beverley in 1886, passed through part of the Avondale property, where a railway siding was established.¹⁴

On 1 March 1889, Nicholas Carey died. He left Avondale to his sixteen-year-old grandnephew, William Herbert deLisle, son of the Reverend Hurzel Carey deLisle, of Guernsey. Avondale at that time was still largely a pastoral station, mostly unfenced and uncleared.¹⁵

Between 1889 and 1894, the Government surveyed 'agricultural areas' in at least forty localities throughout the south and central regions of the State, as part of its activities to encourage settlement and wheat production. *The Homestead Act 1893, The Agricultural Bank Act 1894, The Agricultural Lands Purchase Act 1896*, and the establishment of the Bureau of Agriculture (later Department of Agriculture) were all instigated for the same purpose.¹⁶ One of the Bureau's first resolutions involved a request to Government to finance the establishment of agricultural colleges and experimental farms. The first Experimental Farm was established in 1895, at Hamel, near Waroona, and three farms had been established by 1904.¹⁷ The Experimental Farms were initially required to train students and migrants, and to show that it was possible to make farming pay in the locality.¹⁸

It was during this period of Government investment in agriculture that William Herbert deLisle arrived in Western Australia to take control of Avondale. Title to Avondale was transferred to him on 17 February 1894. DeLisle subdivided half the property into smaller farm lots, most of which were sold by July 1896. Among the new owners were Samuel Adamson, who established a farm known as *Drumclyer* on part of Location K, and Hubert Moncrieff Fisher, who established *The Barracks* on part of Locations 14, 52 and 53, named for the ruins of the soldiers barracks on the property.¹⁹ DeLisle developed the remaining 6,186 acres (2,504 ha) of Avondale. By 1901, he had cleared 800 acres for cultivation, and was

¹⁴ Thomas, Alf T. *The History of Beverley 1946*, Perth, [1946], pp. 3-11; *West Australian Government Gazette*, 9 July 1886, p. 424; Survey map of estate by surveyor John Hall, 1910, op cit.

¹⁵ Deeds of Memorial, Book 11 no.1038 & 1039, 17 February 1894.

¹⁶ *The Homesteads Act*, No. 18 of 1893 & *The Agricultural Bank Act*, No. 21 of 1894, Statutes of Western Australia, Perth, Gov. Printer; Glynn, Sean, *Government Policy and Agricultural Development: A study of the role of government in the development of the Western Australian wheat belt, 1900-1930*, UWA Press, 1975, pp. 85-86.

¹⁷ *Bureau of Agriculture Journal*, 7 August 1894, p. 132 & June 1896, pp. 829-838; Kelsall Binet Architects & Bizzaca and Assoc., *Thematic History and Preliminary Heritage Assessment of Agricultural Research Stations*, June 2000, Summary of findings, p. 5.

¹⁸ 'Students for Experimental Farms', *Department of Agriculture Journal*, September 1903, pp. 238-239; Shea, Greg & French, Dr Bob, 'Background historical information for the assessment of the heritage significance of buildings on Merredin Research Station', Dryland Research Institute, Merredin, 16 December 1998; Kelsall Binet Architects & Bizzaca and Assoc., op cit, Appendix 1, p. 5.

¹⁹ Deed of Memorial, 17 February 1894; Certificate of Title Vol. 59 Fol. 199, 16 July 1894.

running 2,000 sheep and 200 pigs.²⁰ The Stables are believed to have been built by deLisle. The timber-framed iron-clad structure is reputed to be of Yorkshire design, comprising twenty stalls, ten along each side. The building was designed to allow hay or other fodder stored above in the loft to gravitate down into the feed bins of each stall. The Stables are identified on a 1910 detailed site plan of the property.²¹

William deLisle did not reside at Avondale but generally lived in Beverley with his sister, Ethel Elizabeth deLisle, who appears to have accompanied him to Western Australia. Ethel deLisle married Dr Frederick House in 1902. William DeLisle also spent some time in Perth and Britain. He was known locally as 'The Toff' and had the first motor vehicle in the district. He was a committee member of the Beverley Race Club, member of the Roads Board, a JP, and acted as judge at several district agricultural shows. In 1904, deLisle sold Avondale and purchased a flourmill. DeLisle died five years later, aged 36, in York hospital. In 1914, his sister had a tower erected on the Beverley Anglican Church in his memory but it had to be removed in 1926 as it was destabilising the church structure.²²

Avondale was purchased by brothers Charles John Hunt Butcher and William James Butcher. They had arrived in the State in 1876 in the company of their father, after forming the Murchison River Squatting Company with several other Victorian investors. The Company held various North-West stations, including Boolathana near Carnarvon, and property near Guildford. William Butcher served as MLA for Gascoyne, 1901-1911 and Roebourne 1915-1917. By the time the brothers purchased Avondale, the Murchison River Squatting Company had been dissolved.²³ The Butchers enlarged the Avondale landholding to 9,635 acres (3,900 ha) with the repurchase of some of the original Avondale lands which William deLisle had sold, including *Drumclyer* and *The Barracks*, and the addition of other land.²⁴

In 1908, the Butcher brothers offered Avondale to the Government for £5-10-0 per acre. A counter offer of £5-5-0 per acre was accepted in March 1910. Avondale was purchased for £51,494-12-6, under the *Agricultural Lands Purchase Act*. The property was mostly cleared and well fenced by 1910, and was considered 'suitable for immediate settlement'. As well as the Avondale Homestead, barn, stables, well and windmill, there were the homesteads and farm buildings that made up the former farms of *Drumclyer* and *The Barracks*, which added to the value of the place for subdivision purposes. The buildings constructed by Bartram and Kersley in the 1840s are marked on the survey plan for the property but are not mentioned in correspondence, so are assumed as being in poor condition

²⁰ Certificate of Title Vol. 80 Fol. 197, 30 April 1896 & 6 April 1901; *Twentieth Century Impressions of Western Australia*, Facsimile of 1901 edition, Perth, Hesperian Press, 2000, p. 530 (includes a photograph of the Homestead).

²¹ Jones, Henry & Johnston, David, op cit, pp. 14-15. This plan was not copied due to its condition, but the stables are also shown on the 1919 sketch plan of Avondale State Farm in DOLA correspondence file, Avondale Estate, op cit, Vol. 3.

²² Jones, Henry & Johnston, David, op cit, p. 15; *Twentieth Century Impressions of Western Australia*, op cit, p. 530; Erickson, Rica, op cit, p. 808. There is an entry for Ethel deLisle (later wife of Dr F. M. House) but not for William Herbert.

²³ Jones, Henry & Johnston, David, op cit, p. 16; Erickson, Rica, op cit, p. 420.

²⁴ Certificates of Title Vol. 80 Fol. 197, 15 November 1904, Vol. 321 Fol. 60 & Vol. 477 Fol. 53, 8 December 1910. Location 913 and part of Location 848 were added to Avondale by the Butchers.

by this time. The Avondale Estate subdivision survey was carried out by Lands Department Surveyor John Alexander Hall. The property was subdivided into nine farms of varying acreage and a number of smaller blocks of 5 to 20 acres each along the railway line. The Avondale Homestead and farm buildings were situated on Lot 3, of 1,787 acres (723 ha).²⁵

Avondale was under the control of the Lands Department, whose Minister, James Mitchell was also Minister for Agriculture. Throughout his political career, which included two terms as Premier in 1919-1924 and 1930-1933, Mitchell pursued policies of agricultural land settlement and migration, and was instrumental in establishing the Soldier Settlement and Group Settlement schemes.²⁶

The Avondale Estate was gazetted open for selection on 21 December 1910.²⁷ A handsome profit of some £10,000 was expected from the sale of the farms and during the sale period, the Government managed the farming operations. George Stanley (Stan) Makin was appointed resident manager, and operations were overseen by John Robinson, who was manager of the Nangeenan State Farm (later Merredin Research Station). Four of the nine farms on the Avondale Estate were taken up in 1911. Brothers George and Richard John Hancock (father and uncle of the late Lang Hancock) took up Lots 1 and 2, Sir Newton Moore purchased Lot 4 and G. W. Isbister selected Lot 13. The remaining land was used to agist sheep from dry districts, and privately owned horses and cattle were grazed on the Estate. Some 1,110 acres were under fallow.²⁸

Late in 1911, when no further selections had been made, John Robinson suggested that four of the remaining five farm lots be reserved for an agricultural college, with *Drumclyer* remaining available for selection. In 1914, *Drumclyer* was still unselected, and the severe drought of that year resulted in the Hancock brothers and George Isbister relinquishing their farms, leaving the 780-acre (316 ha) farm of Sir Newton Moore as the only part of Avondale in private ownership. The conditional purchase price had proved too high for farmers with limited capital, and the advent of World War One meant that further settlement was unlikely in the immediate future.²⁹

The Government had established another three experimental farms by 1914 and, under the control of the Agriculture Department, systematic experiments and investigations into farming in Western Australian conditions were being undertaken.³⁰

²⁵ DOLA correspondence file, Avondale Estate, Vol. 1, survey map of estate by surveyor John Hall, 1910, & Vol 2, Brief overview of project from Secretary, Lands Purchase Board to Minister for Lands, 17 October 1911, SROWA AN 3/24. CONS 1778, 4915/1910; Certificate of Title, Vol. 477 Fol. 53, 8 December 1910; Jones, Henry & Johnston, David, op cit, pp. 17-18.

²⁶ Bolton, Geoffrey, 'Sir James Mitchell: the Optimist', in Lyall Hunt (ed) *Westralian Portraits*, UWA Press, Perth, 1979, pp. 159-167.

²⁷ Jones, Henry & Johnston, David, op cit, p. 17; DOLA correspondence file, Avondale Estate, Vol. 1 & 2, op cit.

²⁸ Jones, Henry & Johnston, David, op cit, pp. 19-21; DOLA correspondence file, Avondale Estate, Vol. 2 & 3, op cit, & survey map of estate by surveyor John Hall, 1910, op cit.

²⁹ Jones, Henry & Johnston, David, op cit, pp. 19-21; DOLA correspondence file, Avondale Estate, Vol. 2 & 3, op cit.

³⁰ Kelsall Binet Architects & Bizzaca and Assoc., op cit, Summary of findings, pp. 5-6 & Appendix 1, p. 7.

By 1916, consideration was being given to settling returned soldiers on the land and the Avondale Estate was considered suitable to subdivide into twenty smaller soldier settlement farms. The reduced land prices considered appropriate for returned soldiers, however, meant that the Government would sustain a loss of some £29,653 on the Avondale Estate. The Minister for Lands felt that the loss was too large to be justified and, in July 1918 after some debate, the Government approved the surveying of six blocks for returned soldiers from the Beverley district, with the Avondale Homestead block being retained as a training farm, known as Avondale State Farm. The soldier settlers who took up the farms were James Isaac Mann (Lot 1, *The Barracks*); Milton Lucas (Lot 2, *Avon*); Arthur Edward Sewell (Lot 7, *Drumclyer*); John Taylor (Lot 13, *Fair View Hill*, later known as *Annandale*) and Hubert David Smith (Lots 15 and 16, *Chocolate Hills*). Lots 3 and 16, comprising 1,742 acres (705ha), made up Avondale State Farm.³¹

Returned soldier trainee farmers were resident at Avondale State Farm from 1919 to, possibly, 1921. Stan Makin continued as farm manager and his wife provided meals for the trainees. Between 1919 and 1924, various propositions were put forward for the future use of Avondale State Farm. Among the suggestions for the place were: a training farm run by the Ugly Men's Society, a State Farm for the production of pure cereal seed; a training farm for former British officers; an agricultural college; and subdivision into more soldier settler farms or small dairy farms.³² Avondale, unlike most other State Farms, had not been established with a particular research purpose in mind, having been acquired by the government by default.

On 4 April 1924, Avondale was transferred to the Agriculture Department and placed under the control of the Superintendent of Wheat Farms for the production of pure seed wheat and oats. The Agriculture Department *Annual Report* for 1924 lists the place as Avondale Seed Farm.³³ For the first few years, however, the Farm was used as a holding ground for dairy cattle for dispatch to the Group Settlements in the south-west, and was largely concerned with growing cattle feed.³⁴ Research work eventually commenced at Avondale in 1926 and involved experiments with wheat concerning seeding rates and the use of superphosphate. A cottage for a married farm labourer was added in 1928, constructed by G. J. Fairbanks for £549-17-0.³⁵ The Silo, with a capacity of 100 tons, was constructed in 1927, originally for the storage of cattle feed. It was built by Silos Ltd of Perth for £310, with an alternative tender that allowed for 4-inch (10 cm) thick walls, while the standard plan appears to call for 6-inch thick walls (15 cm).

³¹ Jones, Henry & Johnston, David, op cit, pp. 22-25; DOLA correspondence file, Avondale Estate, Vol. 3, op cit, correspondence and sketch map, 1919; Certificate of Title, Vol. 3093 Fol. 215.

³² Jones, Henry & Johnston, David, op cit, pp. 26-27.

³³ Department of Agriculture, *Annual Report*, 1924, p. 3. This is the only occurrence in the Annual Reports of the place being called Avondale Seed Farm. It continued to be referred to as Avondale State Farm.

³⁴ Department of Agriculture, *Annual Report*, 1925, p. 29.

³⁵ Jones, Henry & Johnston, David, op cit, pp. 27-30; Public Works Department (PWD) Plan 25617, 'Married Man's Cottage', signed by Principal Architect W. Hardwick, 4 June 1926; *Western Australian Government Gazette*, 20 April 1928, p. 990; Kelsall Binet Architects & Bizzaca and Assoc., op cit, Avondale data sheet, house 15.

Following construction of the Silo, a demonstration in silage making was given at the first Avondale Field Day, held in 1928.³⁶

Other State farms were established in the 1920s at Wongan Hills (1923), Salmon Gums (1926), Yilgarn (1926) and Damperwah (1926). The 1920s was a period of increased land settlement and agricultural growth as a result of Government promoted migration and the establishment of Group settlements and Soldier settlements.³⁷

In 1930, Avondale became the venue for investigations into the braxy-like disease in sheep, also known as *infectious enterotoxaemia*, or pulpy kidney. The disease originated in the Beverley-York district in 1915 and spread throughout much of the agricultural area. It caused death in sheep within hours of onset, with flock losses of five percent and occasionally as high as thirty per cent. A field Laboratory and quarters were constructed at Avondale to house the research and the research scientists. The Laboratory cost £847, of which the Beverley community contributed £200 and the Council for Scientific and Industrial Research (later CSIRO) provided £500 for equipment, making the Avondale Laboratory one of the best equipped in the State. The quarters cost £197. Both were constructed by G. J. Fairbanks.³⁸ Dr Harold William Bennetts, the first veterinary pathologist appointed to the Department of Agriculture, was in charge of the research on braxy-like disease at Avondale. He identified the cause of the disease and developed a vaccine. Bennetts was awarded a Doctorate in Veterinary Science from the University of Melbourne for this work, which has been described as 'the most important achievement' of Avondale's history in agricultural research.³⁹

Other experiments in sheep husbandry were conducted at Avondale in the 1930s, including breeding lambs for export, botulism in sheep and the effect of sulphur on wool growth. Dr Eric John Underwood, first chair of the School of Agriculture at the University of Western Australia and Dr Bennetts both worked on projects at Avondale, staying at the quarters when necessary, while also working on projects in other parts of the State. During the 1930s, the production of pedigree seed was an important function of Avondale State Farm. Pedigree seed was purchased in small quantities by farmers, and sown and harvested to provide enough seed for the following season's crop. This method allowed farmers to take advantage of the new improved wheat varieties as they were developed.⁴⁰

Between four and six men were employed at Avondale under the farm manager. Two of the men were teamsters who handled the Clydesdale horse teams, and the rest were general farm labourers. Henry John (Jack) Bailey was farm manager from 1925 to 1940, the longest serving manager

³⁶ PWD Plan 25204, 'Reinforced Concrete Silo', May 1927; *Western Australian Government Gazette*, 1 July 1927, p. 1616; Department of Agriculture, *Annual Report*, 1928, p. 5. The Thematic History states that the Silo was constructed by community efforts during a field day, but this is incorrect and appears to be a misreading of the reference to the place in the 1928 Annual Report.

³⁷ Kelsall Binet Architects & Bizzaca and Assoc., op cit, Summary of findings, p. 6.

³⁸ Jones, Henry & Johnston, David, op cit, pp. 30-32; PWD Plan 26467, 'Laboratory for Investigation of Braxy-Like Disease', 25 February 1930; *Western Australian Government Gazette*, 4 April, 1940, p. 1009 (laboratory) & 11 July 1930, p. 1641 (Inspector's quarters).

³⁹ Jones, Henry & Johnston, David, op cit, pp. 30-32.

⁴⁰ Jones, Henry & Johnston, David, op cit, pp. 33-37.

in the history of the place.⁴¹ In December 1936, the State farms were renamed Research Stations, and Avondale became *Avondale Research Station*.⁴² At that time, accommodation included the Homestead, which was occupied by the farm manager and his family, singlemen's quarters and one cottage for a married farmhand (1928 cottage).⁴³

An inspection of the buildings in the mid 1930s, by Public Works Department District architect Gordon Clifton, revealed that the Homestead (referred to as the Administrative Block and the Kitchen Block) were 'very old and generally in a bad state of repair'.⁴⁴ A programme of works was undertaken, which included replastering, pointing up brickwork and stone foundations, repairing plaster and brickwork around window and door frames, the replacement with concrete of a section of timber floor on the west side verandah of the Kitchen Block, and the installation of false partitions to the inside of two external walls in each of four bedrooms to combat problems of severe rising damp. The barn was repaired following storm damage in the early 1930s.⁴⁵

The shortage of quarters for married workers was a concern, as it was considered that married men were more contented and therefore took more interest in their work.⁴⁶ As a matter of urgency, a second cottage was built at *Avondale Research Station*. A contract for the construction was let to G. J. Fairbanks, for £639.⁴⁷ In the 1940s, variety trials on wheat and oats and studies in the nutritional value of hay and pastures were undertaken. During World War Two, trials on flax production were established when the import of flax fibre was restricted.⁴⁸

The post-World War Two period was another boom period for agriculture, with increased land settlement, high production and returns, and the development of new farming technologies and machinery. *Avondale Research Station* was one of a number of sites where ongoing research into clover disease was carried out in the 1940s and 1950s.⁴⁹ In 1948-1949, renovations and repairs were carried out on the existing cottages and the Homestead, the work being undertaken by E. B. Simmons of Beverley. In early 1951, the Clydesdales were replaced with a Chamberlain tractor and Bedford truck. Only two horses were accommodated in the Stables. A new machinery shed was constructed about this time, but it could not house all the new farm machinery that was being acquired, so the use of the Stables as a garage and shearing shed was considered.⁵⁰ The barn was

⁴¹ Jones, Henry & Johnston, David, op cit, pp. 37-40.

⁴² Jones, Henry & Johnston, David, op cit, pp. 33-37.

⁴³ Department of Agriculture File, Avondale Research Station buildings, 1932-1955, SROWA, AN82/3, ACC 1545, Item 574; Kelsall Binet Architects & Bizzaca and Assoc., op cit, Avondale data sheet, house 16.

⁴⁴ Department of Agriculture File, Avondale Research Station buildings, Item 574, op cit, report by Gordon Clifton, 18 November 1935.

⁴⁵ Department of Agriculture File, Avondale Research Station buildings, Item 574, op cit, report by Gordon Clifton, 18 November 1935 & correspondence 18 June 1932.

⁴⁶ Department of Agriculture File, Avondale Research Station buildings, Item 574, op cit, 1937.

⁴⁷ Department of Agriculture File, Avondale Research Station buildings, Item 574, op cit, November 1937-May 1939; *Western Australian Government Gazette*, 4 March 1938, p. 317.

⁴⁸ Jones, Henry & Johnston, David, op cit, pp. 38-40.

⁴⁹ Jones, Henry & Johnston, David, op cit, pp. 38-40.

⁵⁰ Jones, Henry & Johnston, David, op cit, pp. 38-40; Department of Agriculture File, Avondale Research Station buildings, Item 574, op cit, 26 June 1951, December 1952.

converted for use as a machinery workshop at some time and this may have occurred in the 1950s.⁵¹

The Department of Agriculture had 18 research stations under its authority in 1957. That year, a house was built at *Avondale Research Station* for the accommodation of researcher Robin Goulder, who conducted plant-breeding work there for twelve years. This was most likely the State Housing Commission house, style 16C, which was planned for construction in the mid-1950s.⁵² Another long serving farm manager, Peter Shervington, was appointed in 1969 and remained for twelve years. Plant breeding at *Avondale Research Station* was discontinued in the early 1970s, and research into the improvement of carcass quality of crossbred sheep, a study of twin births in cattle and genetic improvement of cashmere fibre in feral goats was undertaken.⁵³

In December 1976, the Avondale Project was initiated as part of the State's 150th year celebrations of European settlement. The Project entailed the restoration of the Homestead and Stables, reconstruction of a blacksmith shop and a horse works, the establishment of a museum of early farm machinery, a cultivar garden of plants dating from the 19th century, a livestock display that included a number of Clydesdales, , and construction of an entrance structure for *Avondale Research Station*. The Homestead was furnished 'in 1900 style' by the Women's Committee of the 150th Year Celebrations.⁵⁴ Horse works was the term applied to the mechanism of cogs and gears which was central to the use of horse power in operating machinery, most commonly a mill for grinding grain.⁵⁵ The Avondale Project was opened on 16 March 1979 by HRH Prince Charles.⁵⁶

Avondale Research Station continued its research function in the 1980s and 1990s, undertaking herbicide trials and research on minimum tillage practices. In 1982, *Avondale Research Station* was vested in the Minister for Agriculture as Reserve 37765. In 1990, the purpose of the Reserve was altered to 'Agricultural research station and historical facilities' to reflect the fact that the restored buildings and machinery museum were then leased jointly to the Shire of Beverley and Alcoa Australia Limited, for the operation of a commercially run farming education and awareness program for the public. The program operates under the name of Avondale Discovery Farm.⁵⁷ As part of the education program, the Avon Ascent Landcare Drive was developed to take visitors on tours around the operating research station.⁵⁸ In 1996, it was announced that research stations were to be known as research support units, and in April 2000, the number of research support units still operating numbered sixteen.⁵⁹

⁵¹ Department of Agriculture, *Annual Report*, 1978, p. 39.

⁵² Jones, Henry & Johnston, David, op cit, pp. 38-40; Department of Agriculture File, Avondale Research Station buildings, Item 574, op cit, 1955; Kelsall Binet Architects & Bizzaca and Assoc., op cit, Appendix A, p. 22 & Avondale data sheet, house 17 or 20. No PWD tender has been located for this building, indicating it was possibly built by the SHC.

⁵³ Jones, Henry & Johnston, David, op cit, p. 43.

⁵⁴ Department of Agriculture, *Annual Report*, 1978, pp. 38-39.

⁵⁵ Spencer, Ida *Darkan's Early Days: One Hundred Years of Darkan's History, 1862-1962*, 1966, p. 24.

⁵⁶ Department of Agriculture, *Annual Report*, 1979, p. 42.

⁵⁷ Jones, Henry & Johnston, David, op cit, p. 48; DOLA Reserve Enquiry, Reserve 37765.

⁵⁸ Jones, Henry & Johnston, David, op cit, pp. 44-48.

⁵⁹ Kelsall Binet Architects & Bizzaca and Assoc., op cit, Appendix A, p. 32.

During the 1979 restoration of the Homestead, evidence was uncovered that the place had been rebuilt following a fire in earlier times, and that some use had been made of bush timbers. Given the different brickwork pattern for the side wings of the main building, which house the bedrooms, it is reasonable to assume they are of different time periods, and may be a reconstruction in brick of previous timber enclosures under the verandah roof. The 1901 photograph of the Homestead shows the wings in brick at this time.⁶⁰

In 2002, the Homestead and Stables operate as historical examples of an early farm residence and stable, complete with a group of Clydesdale horses. The former Laboratory is used as an office and the Silo is unused. *Avondale Research Station* continues to operate as a fully functioning agricultural research facility, committed to developing sustainable farming methods, with Discovery Farm providing an ongoing educational function.

13.2 PHYSICAL EVIDENCE

Avondale Research Station comprises a single storey brick and corrugated iron Homestead, in the Victorian Georgian style, a vernacular single and double storey corrugated iron Stables, a concrete grain Silo, and a single storey brick, an iron Laboratory (former), and 1928 and 1957 workers' dwellings. Other buildings on the site include a workshop, dwelling associated with the Laboratory, weighbridge, and 1979 entry statement, dwellings from c.1960s onwards scattered around the site, other steel framed and clad farm sheds in the vicinity of the Stables and workshops, the museum and toilet buildings.

Avondale Research Station is located on Waterhatch Road, six kilometres west of the town of Beverley. *Avondale Research Station* is setback from the road, in a typical rural wheatbelt landscape of cropped paddocks and farm buildings. The buildings are located approximately 500 metres from the road, on the north side, with only the 1979 set of three timber post and beam arches that form the entry statement visible from the road. The driveway leads through the entry arches to the steel framed and clad Museum and information centre on the right. At that point, on the left (west) is a parkland area with ablutions facilities, on the right, north of the Museum, is an animal nursery. The bitumen road sweeps around to the left with two tracks off to the right (northeast and north), within 20 metres of each other. The north east track leads to the front of the Homestead several hundred metres away, the north track traverses the Silo, machinery sheds, Stables and arrives at the current entry into the Homestead, at the south west corner. The bitumen road turns to the west, with a row of mature gums forming an avenue, and the former Laboratory building on the right (north), with the weighbridge behind. Approximately 50 metres further west of the former Laboratory is a timber framed dwelling. The bitumen road soon becomes a well-graded gravel road that traverses the entire research station with a number of vantage points with signage and interpretation informing of the history and current activities of the place. The outlook is undulating hills and valleys of crop, stock and pasture land as well as re-vegetated areas.

⁶⁰ Department of Agriculture, *Annual Report*, 1978, pp. 38-39; physical evidence; *Twentieth Century Impressions of Western Australia*, op cit, photograph of Avondale Homestead, p. 530.

Located on a rise to the west, the Homestead frontage overlooks the undulating pasturelands to the east. There are gravel tracks to three sides of the Homestead. The track up the north side intersects with another track to the north on which the 1928 and 1957 workers' cottages are located in close proximity to each other, each in a fenced yard. The east track is across the bottom of the 'front' yard of the Homestead, and continues south west back to the Museum and information office, but it also intersects with another track up the south side of the Homestead, to where the current visitor entry to the Homestead is located. On the south side of the track is a group of farm buildings including the workshop and Stables, the Silo further south and then the intersection where the former Laboratory is located.

Homestead

The Homestead site is delineated by a bush timber post and rail fence that has been constructed in recent years around a defined yard. The 'front' yard on the east side slopes down from the Homestead to the road. It is laid out in a symmetrical manner with a central path leading from the gateway (on the east track) direct to a flight of steps up to the front verandah and main entry. The path is lined with overgrown wormwood on both sides, behind which are orchard plantings. The central path intersects with a gravel path parallel with, and across the front, of the Homestead. There are two mature Cape Lilac trees each side of the central path close to the Homestead, obscuring views of the building. The south side garden is laid out in a formal manner with pairs of pencil pines straddling entry paths and a mature palm tree evident. There are no other obvious mature plantings in the area, which is otherwise graveled. There is a paved courtyard space with a covered connection between the two wings of the Homestead and an operational corrugated iron water tank on the southwest corner of the east wing.

The Homestead, a single storey brick and iron two-winged dwelling, displays characteristics of the Victorian Georgian style. Typical of the style is the freestanding rural setting, simple rectangular form, face masonry construction, symmetrical façade, corrugated iron roofs, and colonnade verandah.

The Homestead comprises rectangles buildings with a connecting covered way central between the wings in the central courtyard. Each wing is one room wide with perimeter verandahs. The main entry is central on the east side of the east wing, at the top of a flight of stairs onto the elevated verandah. The entry opens into a central corridor with a room each side and the door ahead opens into the central courtyard space. There is a verandah along the front (east) and rear and enclosed verandahs along the north and south ends of the building, with two rooms each end, each accessed from the respective verandahs. The west wing comprises two interconnected rooms at the south end and two small rooms nearer the north end, both accessed from the courtyard, as is the central room (kitchen) although the southern most room (dining) is accessed from the west side. There is a nib wall, double access and two sets of windows in the kitchen, indicating that it may have been two separate rooms at one time. The north end is the open-ended laundry under the verandah roof.

The Homestead is a brick construction. The main building of the east wing is laid in English Colonial bond, alternating courses of stretcher and header bond. The north and south verandah constructions on the east wing, the west wing building and garden wall are all constructed in English bond (three courses of stretcher bond alternating with one course of headers). The front buildup is a random mortared laterite stone wall. The roofs are hipped, with vented gablets on the east wing, and the verandahs are under the main roof at break pitch. The roofs are clad with corrugated iron. The gutters are ogee profile, but most of the downpipes are PVC connections to the water tank. The chimneys are square in form, face brick with corbelled detail. The verandah across the east frontage of the east wing has vertical timber balusters and a reconstructed timber floor. All the other open verandah floors are concrete. The verandah posts are 0.125 metre milled timber stop chamfered square posts. The posts around the west wing are set into concrete blocks at the base. The window heads on the two windows flanking the front door are detailed in a herringbone brick pattern, but elsewhere on the east and west wing the windows are detailed with a two course header. All the windows have rendered sills. Windows are sets of two casements with two and three panes of glass per sash. The bathroom and toilet windows on the west wall of the west wing have amber glass. The doors are four panelled throughout. The doors at each end of the east wing entry corridor have decorative patterned glass fanlights with the pattern side ways. The door and window hardware is mostly original.

The interior of the Homestead has been restored in recent years. The hard plaster walls remain intact throughout with the original moulded timber skirtings and architraves. There is a hat rack on the wall inside the front door. The floors in the east and west wings are 0.135 metre floorboards and the boards are 0.150 metres wide in the dining room. The timber floors been sealed with a high gloss finish. The remaining floors in the west wing are concrete with vinyl sheet covering the kitchen and ceramic tiles in the bathroom and toilet. The ceilings in the two main rooms and corridor of the east wing are pressed metal all of the same design, with ceiling roses. The north and south verandah rooms have raked ceilings in patterned pressed metal sheeting in a pattern different from the main ceilings. The west wing dining room, kitchen, toilet, and bathroom all have the original ripple iron ceilings. The bathroom and toilet have tiled floors and splashback tiles on the walls. The kitchen stove has splash tiling at the back and around the side of the fireplace opening. Fireplaces and varnished timber mantelpieces are in place in both main rooms in the east wing, and truncated across the southeast corner of the dining room in the west wing. There is a c.1900 built-in wardrobe in the main bedroom of west wing. The kitchen has a recent stove installation, and the bathroom and toilets have fitouts post 1990s. There is a brick 'copper' and c.1950s concrete troughs in the laundry.

Stables

The Stables are a double storey timber framed corrugated iron clad structure with single storey skillions along each side. It is rectangular in plan with symmetrical frontages at the north and south ends. It comprises 10 stalls along each side, within the skillions, at ground level, with an open space through the centre length (north - south) and a single space above.

The exterior walls are clad with vertical sheets of corrugated iron, with a horizontal band of alternating sets of horizontal timber louvres and fixed wire glass windows in a panel along each side on the skillion walls, with corrugated iron on the setback upper walls. The roof is clad with corrugated iron. There are two sets of two steel-framed roof light panels on each side of the double storey gable roof. The structure is bush timber with random dry stone build-up on the east side where the ground level falls away. Concrete spoon drains have been constructed along the east and west sides, and the east side shows evidence of original timber drain outlets from the stalls to the external urine drainage, with more recent metal straps in place. Central on the north and south ends are sets of two timber doors on steel sliding frames. Above the doors is a cantilevered platform, with an open tread staircase access on the north end, providing entry to the upstairs storage area via a door central on that north wall. There is a gantry protruding from the apex of the gable at each end. The ground floor is earthen floored and the upstairs floor is of 0.150 metre wide timber boards with the floor structure forming the ceiling of the wide central space at ground level. The structure has bracing between each stall's structural posts and the ceiling/floor joists, and steel tie rods are at regular intervals across the width of the space. The interior walls are unlined, although the stalls facing into the centre space are lined with horizontal tongue and groove jarrah boards. Milled timber spaced railings and posts form the divisions between the stalls. The stall gates are vertical boards on a frame. Each stall has a timber boarded fodder bin truncated across the corner next to the gate. The bin receives fodder gravity fed through a chute from the grain store above on the first floor. There is a small angled timber detail on the outside of each stall that is part of the chute system. The upper floor was inaccessible at the time of inspection.

At the south end of the Stables is a reconstructed horse works of no heritage significance. Similarly, in the farm shed to the east of the Stables, at the south end, there is a reconstructed blacksmith shop, of no heritage significance.

Silo

The grain Silo is a formed concrete structure. Circular in plan, it is a vertical element capped with a faceted-hipped roof clad with painted corrugated iron. There is a wind vane on the apex of the roof and a miniature dormer in the roof with a timber hatch opening replicating the vertical series of six openings up the Silo, that are aligned with the dormer. There is also a gantry protruding from the dormer.

Laboratory (fmr)

The former Laboratory is a single storey brick rendered and corrugated iron building of no particular style. The building is rectangular in form with a balanced but asymmetrical frontage featuring a symmetrical porch on the east end. The main roof and porch roof are hipped. The building is brick rendered and the porch has a solid rendered dado wall and stair balustrade with pairs of painted square timber posts above. The porch is in an elevated position due to the slope of the land, and is accessed by a set of concrete steps central within the porch. The double entry doors are aligned with the stairs. The windows throughout are timber framed double hung

sashes in varying configurations of sets of two and three on the front façade, and single windows elsewhere. The interior was inaccessible at the time of inspection.

13.3 COMPARATIVE INFORMATION

Homestead and Stables

The Homestead is a good example of a simple 1880s farmhouse and associated kitchen building and is in good condition due to restoration work in the late 1970s and its current use as a museum example of its original function. There are a number of farm homesteads of the period located throughout the State. The Avondale Homestead is a relatively intact example of its type. Because it was owned by the Government and used as employee accommodation it has undergone none of the additions and alterations that would be generally expected of a privately owned family farmhouse. Avondale had only minimal farm buildings constructed, most likely because the place was leased out between the 1840s and 1890s, unlike many owner-operated properties that developed a village-like complex of buildings. The Stables, which date from the 1890s, mark the period of development under a new owner.⁶¹

Other large stable buildings are located at Glengarry where the stone stable is a rare two-storey building with lunging room, which housed horses bred for the British Army remount trade in India. It also has interesting architectural timber detail in the two-storey conical roof structure of the lunging room, which has been restored. *Glengarry Station Complex* is entered on the State Register.

Berkshire Valley Station has a two-storey Stable (c.1855) that includes a harness room, blacksmithy, coach house and stalls and was a staging post for coaches. A similar brick stable building to that at Berkshire Valley is located behind the Colonial Inn at Northam and dates from c. 1910. The Swan Brewery stables, which housed 24 Clydesdale horses up to the late 1940s, were destroyed by fire in the 1980s. The Avondale Stables appear to be unique in the State for their feeding arrangement.⁶²

The Public Works Department developed a range of standard plans for barns, stables, machinery sheds and silos and timber-framed houses in the 1920s. The Silo at Avondale was built to a standard plan and examples remain at other research stations, including Wongan Hills, Salmon Gums and Merredin. The former Laboratory is believed to be unique as a research laboratory purpose built at an agricultural research station in the first half of the twentieth century. Laboratories of individual design have been constructed at Medina, Geraldton, Vasse and Katanning Research Stations in later years.⁶³

⁶¹ Molyneux, Ian & White, John, 'Farmhouses', in Pitt Morrison, M. & White, J. (eds) *Western Towns and Buildings*, UWA Press, 1988, Chapter 7.

⁶² Erickson, R., Taylor, R., and Considine & Griffiths Architects Pty Ltd, *Glengarry Station Stables Complex conservation plan*, October 1999 & Conservation Works Report, June 2000; Moora Historical Society, 'A Sketch of James Clinch of Berkshire Valley', Battye PR6461; Register of the National Estate, Database No. 010230 & 016073; O'Brien Planning Consultants, Town of Northam Municipal Heritage Inventory; January 1998, Place no T08(b), Old Stables.

⁶³ Kelsall Binet Architects & Bizzaca and Assoc., op cit, Avondale data sheet. & p. 16.

Agricultural Research Stations

The Thematic History and Preliminary Heritage Assessment of Agricultural Research Stations has listed both *Avondale Research Station* and Merredin Research Station as having considerable significance.⁶⁴ Merredin, established as Nangeenan State Farm in 1904, is the earliest remaining Research Station and has significance for development of hybrid cereal grains. The Manager's House (1904) is entered on the State Register.

Research stations considered to have some significance are Wongan Hills, (1923) Salmon Gums (1926), Gascoyne (1940), Kununurra (1945) and Esperance Downs (1951). Wongan Hills and Salmon Gums are the only surviving stations established during the Inter-War period and were involved with development of the wheatbelt. Gascoyne was associated with the establishment of tropical agriculture in the State and has buildings from the World War Two period. Kununurra was associated with the Ord River scheme and Esperance Downs with Post War development.

13.4 REFERENCES

13.5 FURTHER RESEARCH

The workshop (former barn), dwelling associated with the Laboratory, weighbridge, 1928 worker's dwelling, 1957 worker's dwelling, and 1979 entry statement may require further investigation as they are possibly of little heritage significance.

Possible archaeological interest of sites in the vicinity of the Homestead and further afield.

Investigate the possible significance of any plantings.

⁶⁴ Kelsall Binet Architects & Bizzaca and Assoc., op cit, p. ii.
Register of Heritage Places –Assessment Doc'n